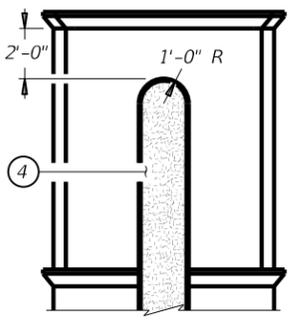


- ① Height "Z" is the total height of the column from the top of the drilled shaft. See quantities note on sheet 4 of 5.
- ② See Roadway plans for the height of the truss above the finished grade.
- ③ Electrical system conduit: Use 6" minimum radius sweeps for bends. No 90 degree elbows are permitted. Install pull tape in empty conduit. Pull tape must have 1250 lbs. minimum tensile strength, and foot length markings. Conduit must extend 6" beyond the concrete as shown, and must be threaded and capped. This conduit may be cut to exact dimension shown on the TMS or other electrical system detail sheet when installed.
- ④ Form liner finish - Scott System #177 "Random Stone" (303-373-2500) or approved equivalent. Base color Sherman Williams SW 6142 "Macadamia" or approved equivalent. Base color is applied to all surfaces unless otherwise noted.
- ⑤ Type DS fill must conform to Item 423, "Retaining Walls", Table 2.

Contractor is responsible for verifying all dimensions and quantities in the field before beginning work.

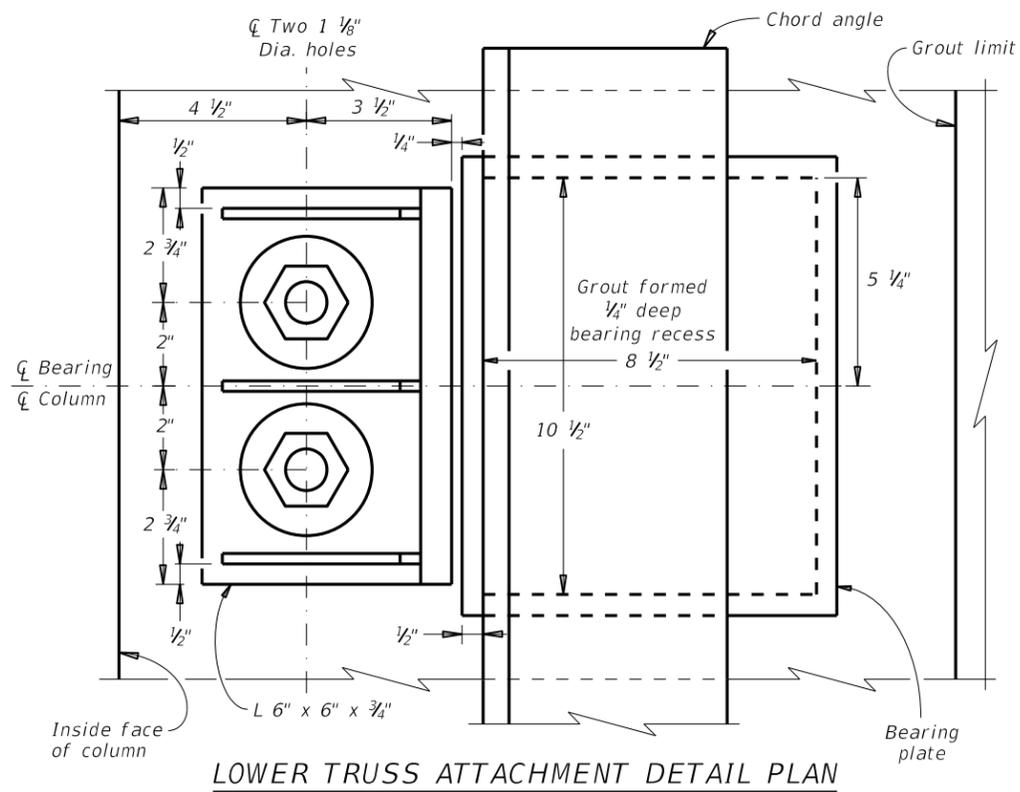
Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bar.



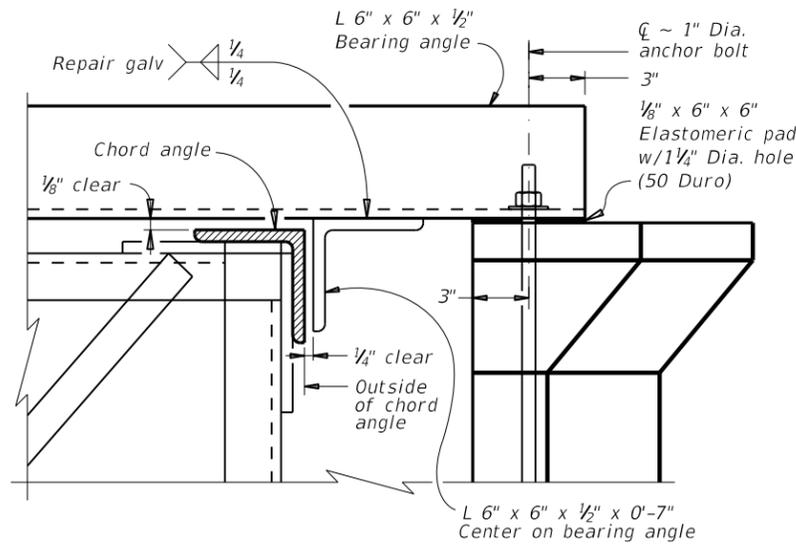
**MISSION THEME
OVERHEAD SIGN COLUMN**
OVERHEAD SIGN BRIDGE
SPANS UP TO 155 FEET

DN: BCL	CK:	FILENAME: Mission Theme OSB.dgn		
DW: SRF	CK:	ORIGINAL DRAWING DATE: January 2020		
DIST	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	COUNTY	
SAT	6		COUNTY	
CONTROL	SECTION	JOB	SHEET NO.	ROUTE
0000	00	000	000	ROUTE

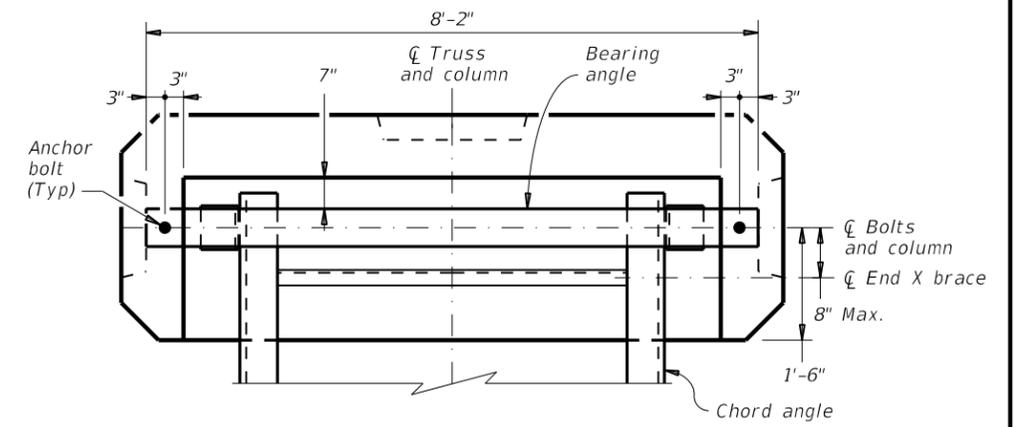
REVISIONS:



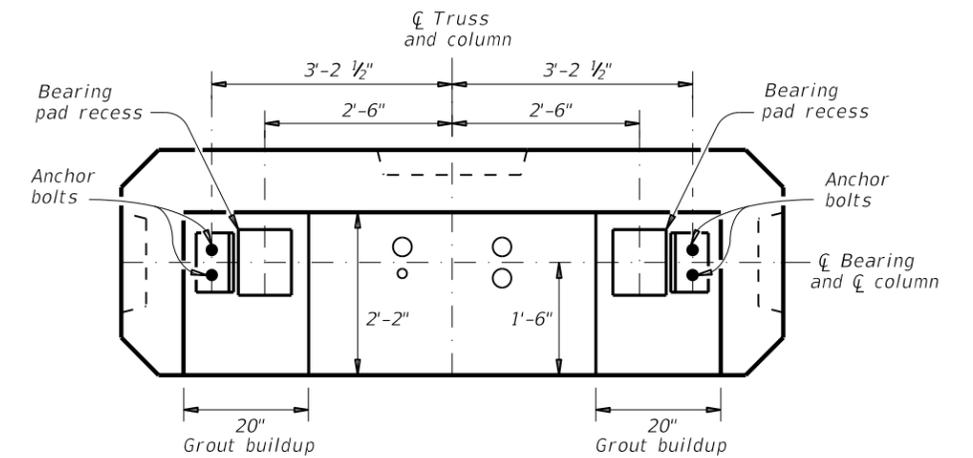
LOWER TRUSS ATTACHMENT DETAIL PLAN



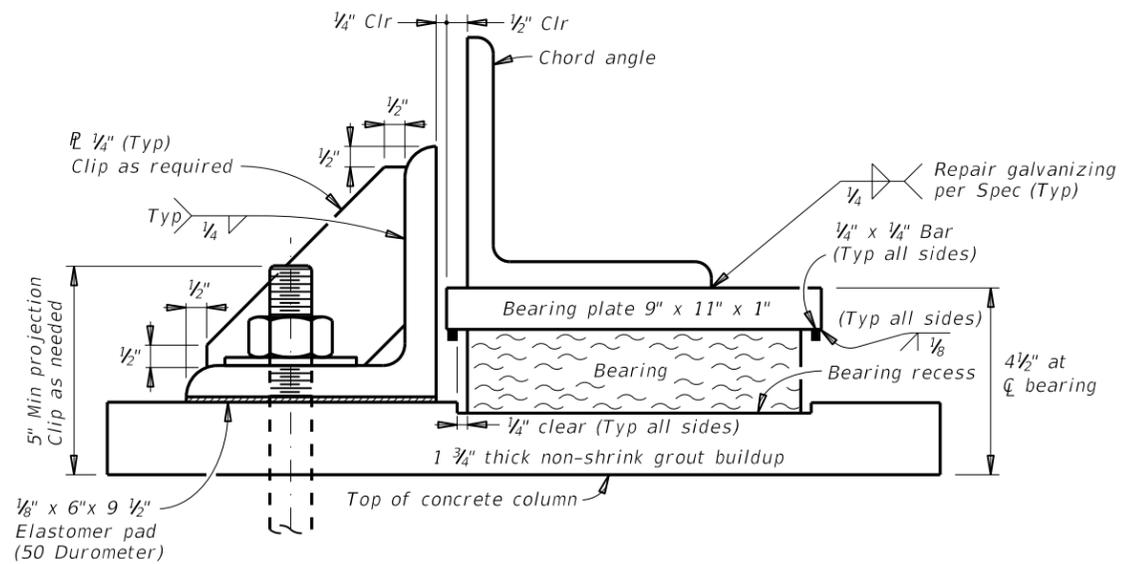
UPPER TRUSS ATTACHMENT DETAIL ELEVATION



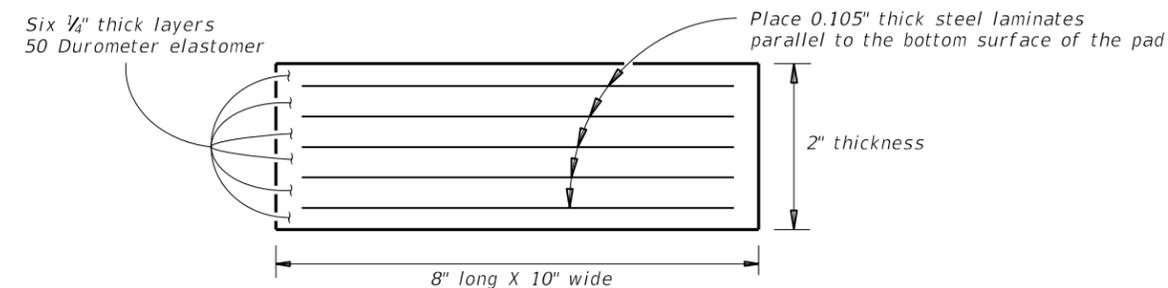
SECTION A
Upper truss attachment.



SECTION B
Lower truss attachment.

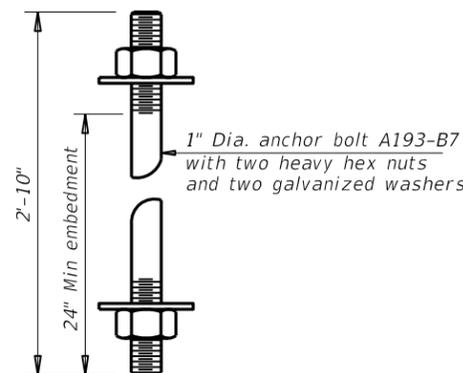


LOWER TRUSS ATTACHMENT DETAIL ELEVATION



LAMINATED ELASTOMERIC BEARING DETAILS

The use of polyisoprene (natural rubber) is not allowed.



ANCHOR BOLT DETAIL

Six total required per column (2 top, 4 bottom).
Snug tighten all anchor bolt nuts.

Contractor is responsible for verifying all dimensions and quantities in the field before beginning work.

Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bar.

SAN ANTONIO DISTRICT STANDARD SHEET 3 OF 5

Texas Department of Transportation
San Antonio District (Structural Design)
Prepared by and for the use of TxDOT

MISSION THEME
OVERHEAD SIGN COLUMN
OVERHEAD SIGN BRIDGE
SPANS UP TO 155 FEET

DN: BCL	CK:	FILENAME: Mission Theme OSB.dgn		
DW: SRF	CK:	ORIGINAL DRAWING DATE: January 2020		
DIST	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	COUNTY	
SAT	6		COUNTY	
CONTROL	SECTION	JOB	SHEET NO.	ROUTE
0000	00	000	000	ROUTE

REVISIONS:

GENERAL NOTES:

Designed in accordance with AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals", 5th Edition and Interem Specifications.

Provide Class C concrete (f'c = 3600 psi).

Provide Grade 60 reinforcing steel.

Chamfer all exposed edges 3/4" unless noted otherwise.

Unless otherwise noted, all concrete surfaces must be smooth and finished with the following paints or approved equivalent:

BASE COLOR: SHERMAN WILLIAMS 6142 "MACADAMIA"

OSB must be paid under Item 650 "OVERHEAD SIGN SUPPORTS" or as shown in the plans.

All connection bolts must conform to Item 447 "Structural Bolting".

All structural steel connection bolts, nuts, rods and washers must be galvanized in accordance with Item 455, "Galvanizing".

Details called for hereon are applicable for Design Wind Heights up to 35' structure.

Design wind speed 100 mph.

**TABLE OF ESTIMATED QUANTITIES
FOR ONE COLUMN "Z" = 30 FT ①**

BAR	NO.	SIZE	LENGTH	WEIGHT
A	21	#11	24'-6"	2734
B	11	#11	18'-5"	1077
C	7	#4	12'-2"	57
D	12	#11	10'-10"	691
E	24	#5	17'-0"	426
F	6	#6	10'-10"	98
G	26	#11	15'-3"	2107
S	40	#5	15'-4"	640
REINFORCING STEEL			LB	7830
CLASS C CONCRETE (COLUMN)			CY	29.7
CLASS C CONCRETE (FOOTING)			CY	9.4

Quantities shown are for Contractor information only.
Footing quantity includes riprap.

① QUANTITIES ARE BASED ON A TOTAL HEIGHT "Z" OF 30'-0".
FOR EACH 1'-0" VARIATION IN "Z", ADJUST AS FOLLOWS:

BARS A LENGTH BY 1'-0"
WEIGHT BY 112 LBS

BARS B LENGTH BY 1'-0"
WEIGHT BY 59 LBS

BARS S COUNT BY 2
WEIGHT BY 32 LBS

CLASS C CONCRETE (COLUMN) BY 0.93 CY

Contractor is responsible for verifying all dimensions and quantities in the field before beginning work.

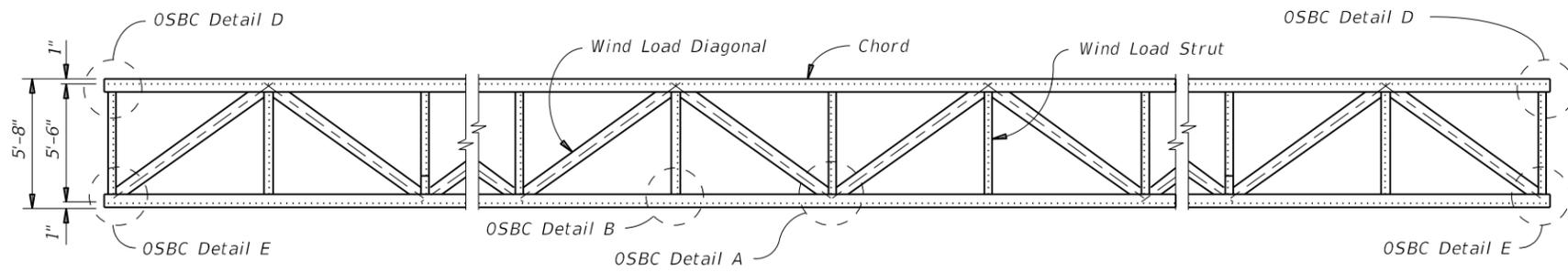
Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bar.



**MISSION THEME
OVERHEAD SIGN COLUMN**
OVERHEAD SIGN BRIDGE
SPANS UP TO 155 FEET

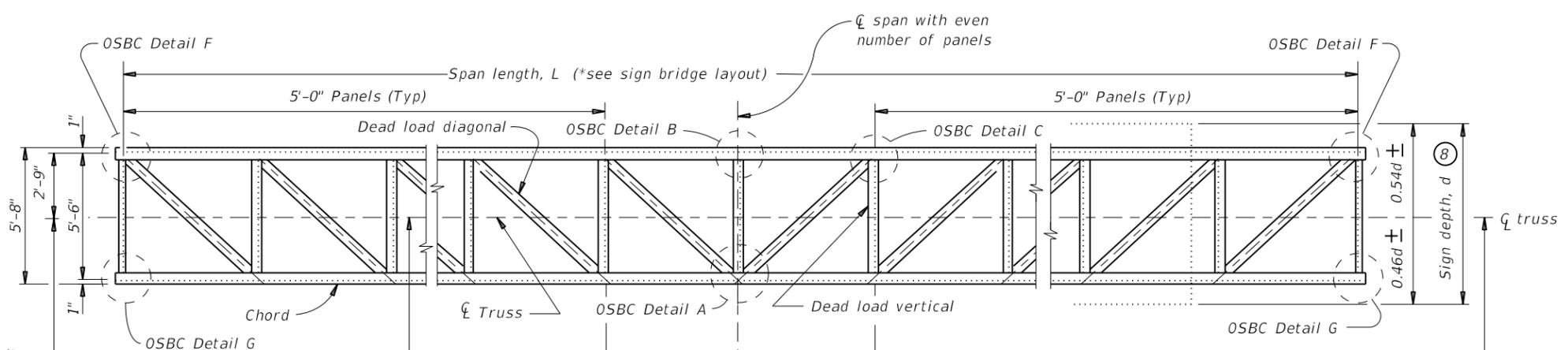
DN: BCL	CK:	FILENAME: Mission Theme OSB.dgn		
DW: SRF	CK:	ORIGINAL DRAWING DATE: January 2020		
DIST	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	COUNTY	
SAT	6		COUNTY	
CONTROL	SECTION	JOB	SHEET NO.	ROUTE
0000	00	000	000	ROUTE

REVISIONS:



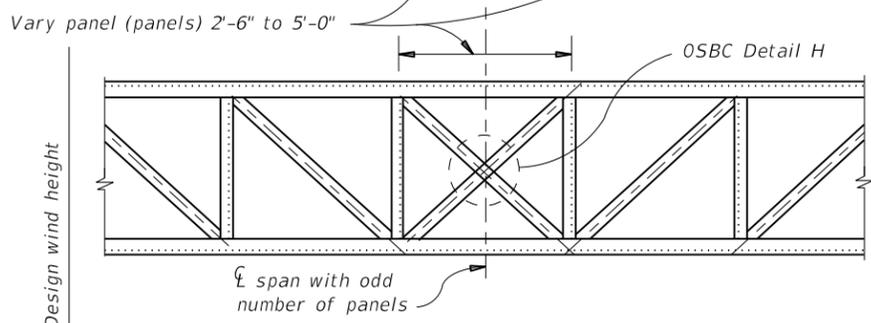
PLAN

See Standard Sheet OSBC for truss details not shown here.



ELEVATION

See Standard Sheet OSBC for truss details not shown here.



⑧ Where signs of different depths are used, the bottom edges of all signs may be placed in line. Where this is done, all signs should be so positioned that the bottom edges are approximately 0.46 of the depth of the deepest sign below the $\bar{\bar{c}}$ of the truss.

DEAD LOAD DEFLECTIONS	
110' SPAN	1.88"
88' SPAN	1.24"

② Height from top of footing to $\bar{\bar{c}}$ of truss See Roadway sign bridge layout

② Height from top of footing to $\bar{\bar{c}}$ of truss See Roadway sign bridge layout



TRUSS DETAILS

See Standard Sheet OSBC for truss details not shown here.

TRUSS DETAILS

Maximum span	155'
W X D = Width X Depth	5.5' X 5.5'
Chord ⑥	L 6 X 6 X $\frac{5}{8}$ [25]
Dead load diagonal ⑦	L 3 X 3 X $\frac{1}{4}$ [3]
Wind load diagonal ⑦	L 4 X 3 $\frac{1}{2}$ X $\frac{5}{16}$ [4]
Dead load vertical ⑦	L 3 X 2 $\frac{1}{2}$ X $\frac{1}{4}$ [2]
Wind load strut ⑦	L 2 $\frac{1}{2}$ X 2 $\frac{1}{2}$ X $\frac{5}{16}$ [1]
Truss dead load	162 lb/ft
Size of HS bolts in splice connection	$\frac{3}{4}$ " diameter

Number of high strength (HS) bolts required in truss connection or splice are indicated with brackets [] after the member size.

⑥ "Low-Alloy Steel" for non-bridge structures per Item 442, "Metal For Structures".

⑦ "Carbon Steel" for non-bridge structures per Item 442, "Metal For Structures".

All truss members are angles. See Standard Sheet "Overhead Sign Bridge Truss Details OSBC" for details not shown here.

Contractor is responsible for verifying all dimensions and quantities in the field before beginning work.

Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bar.

SAN ANTONIO DISTRICT STANDARD SHEET 5 OF 5

Texas Department of Transportation
San Antonio District (Structural Design)
Prepared by and for the use of TxDOT

MISSION THEME OVERHEAD SIGN COLUMN
OVERHEAD SIGN BRIDGE
SPANS UP TO 155 FEET

DN: BCL	CK:	FILENAME: Mission Theme OSB.dgn		
DW: SRF	CK:	ORIGINAL DRAWING DATE: January 2020		
DIST	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	COUNTY	
SAT	6		COUNTY	
CONTROL	SECTION	JOB	SHEET NO.	ROUTE
0000	00	000	000	ROUTE

REVISIONS: